WHAT IS CLAIMED IS:

An image data acquisition method comprising: scanning a sample by a light;

receiving a light from the sample, to acquire a scanned image data; and

storing the scanned image data obtained by scanning a region of a predetermined size every time a region scanned by the light reaches a predetermined size, sequentially.

- The image data acquisition method according to claim 1, wherein, the size of the scanned region by the light is changed according to an arrangement position thereof, when a plurality of measurement objects are arranged in the sample.
- The image data acquisition method according to claim 2, wherein position information on respective scanning regions is stored to be added to each item of the scanned image data sequentially stored.
- The image data acquisition method according to claim 2, wherein the sample is a DNA microarray in which a number of spots are arranged as a measurement object, and the size of the scanning region is such that a boundary in the scanning region is not overlapped on the spot.
- 25 The image data acquisition method according to claim 2, wherein the scanning by the light is carried out by main scanning and sub-scanning in a direction

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orthogonal thereto, and adjustment of the size of the scanning region is carried out by regulating the number of scanning lines of the main scanning.

- 6. The image data acquisition method according to claim 1, wherein an analysis processing is executed for the stored scanned image data in parallel with scanning of a next region when the storage of the scanned image data completes.
- 7. The image data acquisition method according to claim 6, wherein the sample is a DNA microarray in which a number of spots are arranged as a measurement object, and the size of the scanning region is such that a boundary in the scanning region is not overlapped on the spot.
- 8. The image data acquisition method according to claim 1, wherein the scanning by the light is carried out by main scanning and sub-scanning in a direction orthogonal thereto, and both of the main scanning and the sub-scanning are carried out by moving the sample.
- 9. The image data acquisition method according to claim 1, wherein the scanning by the light is carried out by main scanning and sub-scanning in a direction orthogonal thereto, and the main scanning is carried out by an optical scanner.

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